

Puerto Rico Census 2000 Responses to the Race and Ethnicity Questions

FINAL REPORT

This evaluation reports the results of research and analysis undertaken by the U.S. Census Bureau. It is part of a broad program, the Census 2000 Testing, Experimentation, and Evaluation (TXE) Program, designed to assess Census 2000 and to inform 2010 Census planning. Findings from the Census 2000 TXE Program reports are integrated into topic reports that provide context and background for broader interpretation of results.

Matthew Christenson, Ph.D.
Population Division

USCENSUSBUREAU

Helping You Make Informed Decisions

Intentionally Blank

CONTENTS

LIST OF TABLES	iii
EXECUTIVE SUMMARY	v
1. BACKGROUND	1
1.1 Why were questions on race and Hispanic origin asked in Puerto Rico?	1
1.2 What is being said in general about the race and Hispanic origin questions from Census 2000?	1
1.3 What does prior research on the race and Hispanic origin questions used in Census 2000 indicate about the likelihood of their success in Puerto Rico?	1
1.4 What was the impetus and guidelines for the current study?	2
2. METHODS	2
2.1 What methods were used to generate the results of this study?	2
2.2 What are the limitations of this study?	3
3. RESULTS	3
3.1 How did the population of Puerto Rico respond to the question on Hispanic origin?	3
3.2 How did the population of Puerto Rico respond to the question on race?	5
3.2.1 Responses to the race question using mutually exclusive categories	6
3.2.2 Responses to the race question using the multiple race categories	7
3.2.3 Responses to the race question by selected Hispanic origin groups	8
3.2.4 The write-in responses to the race question	10
3.3 What are the item non-response rates for the Hispanic origin question?	12
3.4 What are the item non-response rates for the race origin question?	12
3.5 Does the response mode (individual or enumerator supplied) affect the responses to the race and Hispanic origin questions?	13
4. RECOMMENDATIONS	16
Acknowledgments	17
References	18
Appendix A: Census 2000 Race and Hispanic Origin Numeric Distribution in Puerto Rico and the 50 States and D.C.	19
Appendix B: Census 2000 Questions on Hispanic Origin and Race	20

LIST OF TABLES

Table 1:	Census 2000 Hispanic origin percent distribution in Puerto Rico and the 50 States and D.C.	4
Table 2:	Types of Census 2000 responses to the Hispanic origin question in Puerto Rico	5
Table 3:	Census 2000 race alone distribution by Hispanic origin in Puerto Rico and the 50 States and D.C.	7
Table 4:	Census 2000 race alone or in combination distribution of total responses by Hispanic origin in Puerto Rico and the 50 States and D.C.	8
Table 5a:	Census 2000 race alone distribution by Hispanic origin in Puerto Rico	9
Table 5b:	Census 2000 race alone distribution by Hispanic origin in the 50 states and the District of Columbia	10
Table 6:	Types of Census 2000 responses to the race question in Puerto Rico	11
Table 7:	Percent of responses to the Hispanic origin question resulting from edit and allocation process by Hispanic origin type in Puerto Rico and the 50 States and D.C.	12
Table 8:	Percent of responses to the race question resulting from the edit and allocation process by Hispanic origin in Puerto Rico and the 50 States and D.C.	13
Table 9:	Census 2000 Hispanic origin distribution by Response Mode (Individual or Enumerator Supplied) in Puerto Rico and the 50 States and D.C.	14
Table 10:	Census 2000 race alone distribution by Response Mode (Individual or Enumerator Supplied) of those of Hispanic origin in Puerto Rico and the 50 States and D.C.	15

Intentionally Blank

EXECUTIVE SUMMARY

In Census 2000, questions on race and Hispanic origin were asked of individuals in Puerto Rico for the first time. The specific questions that were asked of residents in Puerto Rico were identical to the questions asked in the 50 states and the District of Columbia (D.C.). Both the newness of the data and the uncertainties associated with the race question contributed to a high level of interest in the responses by residents of Puerto Rico to these questions.

The goal of this study was to examine the data resulting from the responses to the race and Hispanic origin questions by the residents of Puerto Rico during Census 2000 and to compare them with those resulting from responses to the race and Hispanic origin questions by residents of the 50 states and D.C..

The analysis shows that the residents of Puerto Rico identified themselves as overwhelmingly of Hispanic origin and of a single race. In terms of race, the great majority identified themselves as White, with a substantial minority reporting themselves as Black or African American. When compared with those of Hispanic origin in the 50 states and D.C., substantially fewer reported themselves to be of Some Other Race, and a lower percentage identified themselves as of Two or More Races. The analysis also shows that two typical indicators of problematic questions, item non-response and differences between respondent and enumerator completed questionnaires, did not indicate major problems with either question.

From these findings come the following recommendations for improvements and for further research.

- Include Puerto Rico in the cognitive testing or efforts to field test different versions and formats of questions and questionnaires that are currently underway for the 2010 census.
- Investigate further the use of the “Some Other Race” category of the race question to assure that the range of responses excludes those that better fit the Hispanic origin question.

Intentionally Blank

1. BACKGROUND

In Census 2000, questions on race and Hispanic origin were asked of individuals in Puerto Rico for the first time. Prior to this, the last indication of the racial composition of the people of Puerto Rico came from the 1950 census, during which enumerators entered the race of the respondent on the questionnaire by observation. The resulting absence of information on race and Hispanic origin in the Commonwealth generated much interest in how the residents of Puerto Rico would respond to these questions.

1.1 Why were questions on race and Hispanic origin asked in Puerto Rico?

The decision to include questions on race and Hispanic origin for Census 2000 in Puerto Rico occurred because the government of Puerto Rico requested the same questionnaire content as stateside in order to speed the processing and release of Puerto Rico census data and so that Puerto Rico could be included in stateside statistics.

1.2 What is being said in general about the race and Hispanic origin questions from Census 2000?

The questions on race and Hispanic origin used during Census 2000 (see Appendix B) have attracted attention on their own due to changes in the way these questions were asked in the 50 States and D.C. compared with the questions in the 1990 Census. The main change in the race question was that respondents were allowed to indicate multiple races for the first time. In addition, the order of the race and Hispanic origin questions was switched in 2000 so that the Hispanic origin question directly preceded the race question. These changes and the uncertainties associated with them add an additional level of complexity to the analysis of the responses to the race and Hispanic origin questions in Puerto Rico.

1.3 What does prior research on the race and Hispanic origin questions used in Census 2000 indicate about the likelihood of their success in Puerto Rico?¹

Prior research in the 50 U.S. states and D.C. generally supported the Hispanic origin question used in Census 2000 but raised questions about the data resulting from the race question. These studies suggested that those of Hispanic origin tend not to differentiate between the concepts of race and Hispanic origin. They are also more likely than other groups to report difficulty answering the race question and to find no acceptable preprinted category (Davis, et. al., 1998a; Davis, et al, 1998b; Gerber and de la Puente, 1998; Harrison, et. al., 1996;). These findings, although not directly generalizable to Puerto Rico, suggest that the results from the questions on race and Hispanic origin in Puerto Rico merit the scrutiny afforded by the current study.

¹In order to maintain independence of results, this study was conducted without consulting the Census 2000 Testing, Experimentation, and Evaluation report B13: *Puerto Rico Focus Groups on the Census 2000 Race and Ethnicity Questions*.

1.4 What were the impetus and guidelines for the current study?

This study was requested by the Census 2000 Evaluations Executive Steering Committee of the U.S. Census Bureau. Its goal was to examine the data resulting from the responses to the race and Hispanic origin questions by the residents of Puerto Rico during Census 2000 and to compare them with those resulting from responses to the race and Hispanic origin questions by residents of the 50 states and D.C.. Five specific sets of questions were designated to guide the study.

1. How did the residents of Puerto Rico answer the race and Hispanic origin questions? How many reported more than one race? How does this compare with the general U.S. population?
2. How did those of Hispanic origin in Puerto Rico answer the race question? How many reported more than one race? Are there any differences between the selected Hispanic origin groups? How does this compare with the population of Hispanic origin in the 50 states and D.C.? With the population of Puerto Rican origin in the 50 states and D.C.?
3. What is the item non-response rate for the race and Hispanic origin questions? Are there any differences between the selected Hispanic origin groups? How do these item non-response rates compare with item non-response rates for the general U.S. population? For the population of Hispanic origin in the 50 states and D.C.? For the population of Puerto Rican origin in the 50 states and D.C.?
4. Are there any differences in item non-response based on age, education, and income of householder?
5. What are the observed differences in the reporting of race by response mode (individual or enumerator administered)? What are the observed differences in the reporting of Hispanic origin by response mode?

2. METHODS

2.1 What methods were used to generate the results of this study?

The methods used to generate the results of this study were relatively straightforward. First, a list of analyses to be performed was generated from the five sets of questions designated to guide the study. This list guided the preparation of frequency and cross-tabulation tables from the Census 2000 One Hundred Percent Detail Files (HDF) for both Puerto Rico and the 50 states and

D.C..² From these tables, textual descriptions of the patterns in the data were developed and summarized.

Quality assurance procedures were applied to the design, implementation, analysis, and preparation of this report. The procedures encompassed methodology, specification of project procedures and software, computer system design and review, development of clerical and computer procedures, and data analysis and report writing. A description of the procedures used is provided in the “Census 2000 Evaluation Program Quality Assurance Process.”

2.2 What are the limitations of this study?

Because this study is the first to look at race and Hispanic origin in Puerto Rico, it does have limitations. The lack of any previous quantitative measures of race and Hispanic origin in Puerto Rico renders it difficult to evaluate the reliability of the questions. Moreover, the absence of any cognitive studies on the questions on race and Hispanic origin in Puerto Rico prevents the drawing of any definitive conclusions about what led the residents of Puerto Rico to answer the way they did. Finally, general questions about the revised race and Hispanic origin questions create ambiguity over the extent to which the responses of Puerto Ricans were shaped by their understanding of their racial identity as opposed to the way they interpreted and reacted to the question itself. Consequently, the results of this study should be considered an initial look into the matter and should be followed up by more extensive research.

3. RESULTS

3.1 How did the population of Puerto Rico respond to the question on Hispanic origin?

In Puerto Rico, an overwhelming 98.8 percent of the population identified themselves as of Hispanic origin (Table 1).³ In terms of specific origin groups, the majority identified themselves as of Puerto Rican origin (95.1 percent), with another 1.5 percent reporting themselves as of Dominican origin, and less than 1.0 percent identifying themselves as either of Cuban (0.5) or Mexican (0.3) origin.

This identification is very different than in makeup of the 50 states and D.C., where 12.5 percent of the population identified themselves as of Hispanic origin. Of these, the great majority identify themselves as of Mexican origin (7.3 percent), with 1.2 percent of the population identifying themselves as of Puerto Rican origin. Note, however, that although the percentage of

² The investigation of the fourth question designed to guide this study (results not shown) required use of the Sample Detail Edited File (SEDF). However, preliminary analysis showed little substantive effect of any of the variables. Moreover, it was concluded that this analysis would be more appropriately done in a multivariate analysis. For these reasons, the results are not presented in this document.

Similarly, some reviewers suggested it would be interesting to investigate the responses of those born in Puerto Rico living in both the 50 states and D.C. and in Puerto Rico. Again, preliminary analysis showed very little substantive difference from the responses of those of Puerto Rican origin in either location, so these results are not presented in this document.

³See appendix A for numerical distributions.

the population in the 50 states and D.C. may make the population of Puerto Rican origin seem small, it is almost as large in numerical terms as the population in Puerto Rico who identify themselves as of Puerto Rican origin (3.4 million vs. 3.6 million respectively).

Table 1: Census 2000 Hispanic origin percent distribution in Puerto Rico and the 50 states and D.C.

Origin	Puerto Rico	50 states and D.C.
Hispanic	98.8	12.5
-Puerto Rican	95.1	1.2
-Dominican	1.5	0.3
-Cuban	0.5	0.4
-Mexican	0.3	7.3
-Other Hispanic	1.4	3.3
Non-Hispanic	1.2	87.5
Total	100.0	100.0

An analysis of the write-in responses to the question on Hispanic origin by the residents of Puerto Rico supports these findings (Table 2). 96.1 percent of the respondents to the question on Hispanic origin utilized the check boxes alone, with only 3.9 percent providing write-in responses. Of those providing write-in responses, 37.6 percent simply mirrored the information in the check boxes (e.g., “Mexican,” “Puerto Rican,” “Cuban,” etc.), while 52.8 percent offered an association with an alternative location (e.g., Spain or elsewhere in Latin America). Not surprisingly due to the proximity of the Dominican Republic to Puerto Rico, the most common response of those providing write-in responses was “Dominican.”

Table 2: Types of responses to the Hispanic origin question in Puerto Rico

Response type	Percent
Check boxes alone	96.1
-Puerto Rican checkbox	93.8
-Cuban checkbox	0.5
-Mexican, Mexican Am., Chicano checkbox	0.3
-Other Spanish/Hispanic/Latino checkbox	0.4
-Not Spanish/Hispanic/Latino checkbox	1.1
Write-in responses	3.9
Write-in responses detail	100.0
-Mirrored checkbox (e.g., “Mexican,” “Puerto Rican,” etc.)	37.6
-Multiple response	6.5
-Other Response	3.1
-Detailed Hispanic groups	52.8
-Detailed Hispanic groups detail	100.0
-Dominican	71.4
-South American (e.g., “Argentinian,” “South American,” etc.)	11.6
-Spanish (e.g., “Spaniard,” “Catalonian,” etc.)	5.7
-Central American (e.g., “Costa Rican”, “Central American,” etc.)	4.8
-North American (e.g., “Mexican American Indian,” Tejano,” etc.)	0.1
-General descriptor (e.g., “Latin,” “Latin American,” etc.)	6.4

3.2 *How did the population of Puerto Rico respond to the question on race?*

Because the race question in Census 2000 permitted individuals to select more than one race, it has become challenging to present the data in a way that effectively communicates the patterns in the data while honoring the identification of the respondents. One strategy for doing this is to present two tables of information, each which has a complementary advantage. The first table consists of groups of individuals who identified themselves as of each race alone and includes an additional category of Two or More Races. This presentation has the advantage of mutually exclusive categories and components that sum to the total population, but the disadvantage of simplifying the responses indicated. The second table categorizes individuals who identified themselves as each race alone or in combination with any other race. While this presentation

does not allow for mutually exclusive categories or components that sum to the total population, it does capture everyone who identified with each race group and preserves self-identification. Together, these complementary tables present a fairly full picture of the patterns in the data.

3.2.1 Responses to the race question using mutually exclusive categories.

Table 3 presents the responses to the race question by residents of Puerto Rico using mutually exclusive categories. Because such a high percentage of the residents of Puerto Rico identify themselves as of Hispanic origin, the table is also stratified by Hispanic origin (Hispanic/Non-Hispanic) so that the presentation of data from the 50 states and D.C. might be comparable.

As is demonstrated below, more than 95 percent of people who identified themselves as of Hispanic origin in Puerto Rico also identified themselves as of one race. The great majority of those who identified themselves as Hispanic also reported themselves as White alone (80.7 percent), while 7.9 percent identified themselves as Black or African American alone, and just under 7 percent reported themselves as of Some Other Race alone.

These responses are quite different from those of residents of the 50 states and D.C. who identified themselves as of Hispanic origin. While over 90 percent identified themselves as of one race alone, the choice of which race to identify was quite different. Less than 50 percent of those who identified themselves as of Hispanic origin in the 50 states and D.C. identified themselves as White alone and just 2.0 percent reported themselves as Black or African American alone, while more than 40 percent identified themselves as of Some Other Race alone.

Table 3: Census 2000 race alone distribution by Hispanic origin in Puerto Rico and the 50 states and D.C.

Race	<u>Puerto Rico</u>		<u>50 states and D.C.</u>	
	Hispanic	Non-Hispanic	Hispanic	Non-Hispanic
White alone	80.7	74.1	47.9	79.1
Black or African American alone	7.9	11.0	2.0	13.8
American Indian & Alaska Native alone	0.3	1.2	1.2	0.8
Asian alone	0.1	6.3	0.3	4.1
Native Hawaiian & Other Pacific Islander alone	--	0.8	0.1	0.1
Some Other Race alone	6.9	0.8	42.2	0.2
Two or More Races	4.1	5.8	6.3	1.9
Total	100.0	100.0	100.0	100.0

3.2.2 Responses to the race question using the multiple race categories.

When the data are presented by grouping respondents who identified each race either alone or in combination with another race (Table 4), the same pattern emerges as when the data are presented by grouping only those respondents who identified each race alone. The great majority of the residents of Puerto Rico who identify themselves as of Hispanic origin also identified themselves as White alone or in combination with another race (80.5 percent of all responses), with a substantial minority identifying themselves as Black or African American alone or in combination with another race (10.4 percent of all responses), and 8.0 percent identifying themselves as of Some Other Race alone or in combination with another race. This is in contrast to those who identify themselves as of Hispanic origin in the 50 states and D.C., where they are pretty evenly split between those who identified themselves as White alone or in combination and Some Other Race alone or in combination.⁴

⁴As in this first evaluation of the responses to the race question, the conclusions in the rest of this paper are the same whether one examines the data in mutually exclusive categories or by multiple race. Consequently, data in the rest of this paper will only be presented in mutually exclusive categories.

Table 4: Census 2000 race alone or in combination distribution of total responses by Hispanic origin in Puerto Rico and the 50 states and D.C.

Race	<u>Puerto Rico</u>		<u>50 states and D.C.</u>	
	Hispanic	Non-Hispanic	Hispanic	Non-Hispanic
White alone or in combination	80.5	74.2	49.8	78.9
Black or African American alone or in combination	10.4	12.4	2.8	14.1
American Indian & Alaska Native alone or in combination	0.7	1.8	1.8	1.4
Asian alone or in combination	0.3	7.5	0.8	4.6
Native Hawaiian & Other Pacific Islander alone or in combination	0.1	1.0	0.3	0.3
Some Other Race alone or in combination	8.0	3.1	44.5	0.7

3.2.3 Responses to the race question by selected Hispanic origin groups.

Tables 5a and 5b present the responses to the race question by selected Hispanic origin groups for both Puerto Rico and the 50 states and D.C.. Here we see some differences between the selected Hispanic origin groups. In Puerto Rico, the responses of those residents identifying themselves as of Puerto Rican origin mirror those identifying themselves as of Hispanic origin in general, with over 80 percent identifying themselves as White alone, 7.6 percent as Black or African American alone, 6.6 percent as Some Other Race alone, and 4.0 percent identifying themselves as of Two or More Races. These findings were expected because those who identify themselves as of Puerto Rican origin make up a very large percentage of the entire Hispanic origin category. Residents of Puerto Rico identifying themselves as of Mexican origin also follow this pattern very closely.

The other selected Hispanic origin groups analyzed display some distinctive patterns. On the one hand, just under one third of the residents of Puerto Rico who identified themselves as of Dominican origin also identified themselves as White alone, with another 30.8 percent identifying themselves as Black or African American alone, 22.1 percent as Some Other Race alone, and 11.0 percent identifying themselves as of Two or More Races. In contrast, 93.8 percent of the residents of Puerto Rico who identified themselves as of Cuban origin also identified themselves as White alone, with only 2.3 percent identifying themselves as Black or

African American alone, 1.9 percent as Some Other Race alone, and 1.6 percent as of Two or More Races.

Table 5a: Census 2000 race alone distribution by Hispanic origin in Puerto Rico

Race	Puerto Rican	Dominican	Cuban	Mexican	Other Hispanic
White alone	81.4	33.2	93.8	77.9	69.3
Black or African American alone	7.6	30.8	2.3	6.7	8.5
American Indian & Alaska Native alone	0.3	1.4	0.1	1.1	1.3
Asian alone	0.1	1.5	0.2	0.6	0.4
Native Hawaiian & Other Pacific Islander alone	--	--	0.2	0.3	0.3
Some Other Race alone	6.6	22.1	1.9	9.1	12.4
Two or More Races	4.0	11.0	1.6	4.3	7.8
Total	100.0	100.0	100.0	100.0	100.0

When the responses to the race question by the residents of Puerto Rico in selected Hispanic origin groups are compared with the responses of the respective groups in the 50 states and D.C., an interesting pattern can be observed. The responses display similarities both to those of residents of the 50 states and D.C. who identified themselves as of the same selected Hispanic origin group and to residents of Puerto Rico identifying with the other selected Hispanic origin groups. For example, those residents of the 50 states and D.C. who identify themselves as of Puerto Rican origin reflect the overall pattern of those of Hispanic origin in the U.S. in that they are more evenly split in identifying themselves as White alone and Some Other Race alone, but they also identify themselves less often as Black or African American alone as do residents of Puerto Rico who identify themselves as Puerto Rican origin. Similarly, those residents of the 50 states and D.C. who identify themselves as of Dominican origin reflect the overall pattern of those of Hispanic origin in the U.S. in that they identify themselves more often as Some Other Race alone, but they also identify themselves more often than any other Hispanic origin group as Black or African American alone as do residents of Puerto Rico who identify themselves as Dominican origin. The same is true for the other selected groups by Hispanic origin. Hence, the responses to the race question seem to reflect a mix of influence between the respective Hispanic origin category with which an individual identifies and the immediate geographic context in which that individual lives.

Table 5b: Census 2000 race alone distribution by Hispanic origin in the 50 states and D.C.

Race	Puerto Rican	Dominican	Cuban	Mexican	Other Hispanic
White alone	47.4	22.6	84.6	47.3	46.3
Black or African American alone	6.5	9.2	3.8	0.8	2.3
American Indian & Alaska Native alone	0.6	0.8	0.1	1.3	1.3
Asian alone	0.5	0.2	0.3	0.3	0.5
Native Hawaiian & Other Pacific Islander alone	0.3	0.1	0.2	0.1	0.2
Some Other Race alone	37.3	58.1	7.2	45.2	40.6
Two or More Races	7.4	9.0	3.8	5.0	8.8
Total	100.0	100.0	100.0	100.0	100.0

3.2.4 The write-in responses to the race question.

As with the question on Hispanic origin, the write-in responses to the race question both of residents of Puerto Rico who identify themselves as of Hispanic origin taken as a whole (Table 6) and of the residents of Puerto Rico divided by their identification with the selected Hispanic origin groups (results not shown) provide general support for the findings reported above. Of almost 4 million total responses to the race question, more than 90 percent consisted of marks in the check boxes alone. Of these responses, almost all consisted of marks in White check box (79.6 percent) and/or the Black or African American checkbox (10.1 percent). In contrast, only 0.3 percent of responses consisted of just marks in the Some Other Race check box.

Examining the write-in responses themselves, 82.8 percent of the approximately 365,000 responses were in the space provided to specify the Some Other Race response. Interestingly, almost two-thirds of these consisted of individuals providing responses in which they identified their Hispanic origin and not their race. The same pattern can be observed when looking at the data stratified by the selected Hispanic origin groups.

Table 6: Types of Census 2000 responses to the race question in Puerto Rico

Response type	Percent
Check box responses	90.8
-White	79.6
-Black or African American	10.1
-Some Other Race	0.3
-Other (e.g., “Native American Indian or Alaska Native,” “Asian,” etc.)	0.8
Write-in responses	9.2
Write-in detail	100.0
-White (e.g., “White,” “Arab,” “English,” etc.)	8.7
-Black or African American (e.g., “Black,” “African,” “Negro,” etc.)	3.9
-Native American Indian or Alaska Native (“American Indian,” “South American Indian,” etc.)	2.7
-General response (e.g., Native American)	2.5
-Specific Tribe (“Santo Domingo,” “Tohono O’odham,” etc.)	0.2
-Asian	1.8
-Native Hawaiian and Other Pacific Islander	0.1
-Some Other Race	82.8
-Some Other Race detail	100.0
-Hispanic origin answer (e.g., “Hispanic,” “Puerto Rican,” etc.)	63.8
-Color response (e.g., “Moreno,” “Brown,” etc.)	31.9
-Mixed race response (e.g., “Mixed,” “Mulatto,” “Multiracial,” etc.)	1.8
-Other (e.g., “Creole,” “Indian,” etc.)	2.5

3.3 *What are the item non-response rates for the Hispanic origin question?*

In general, item non-response (including invalid responses) for questions on a Census is one typical indicator of how well a question has been received and handled by the respondents. Typically this is measured by the number of responses that need to be generated by the edit and allocation process during Census processing. As Table 7 shows, the item non-response rate in Puerto Rico for the Hispanic origin question was not unreasonable, being under 5 percent and almost half of the rate for the comparable group in the 50 states and D.C.. In terms of the selected Hispanic origin groups, all of the rates of those who identified themselves as something other than of Puerto Rican origin were higher than the average.⁵

Table 7: Percent of responses to the Hispanic origin question resulting from the edit and allocation process by Hispanic origin type in Puerto Rico and the 50 states and D.C.

Origin	Puerto Rico	50 states and D.C.
Hispanic	4.6	9.2
-Puerto Rican	4.2	6.8
-Dominican	7.9	8.6
-Cuban	4.9	6.9
-Mexican	5.4	6.7
-Other Hispanic	26.9	15.9
Non-Hispanic	11.3	5.5
Total	4.7	6.0

3.4 *What are the item non-response rates for the race question?*

Table 8 shows the item non-response rates in Puerto Rico and the 50 states and D.C. for the race question. As with the rates for the Hispanic origin question, the rate for those of Hispanic origin in Puerto Rico is not unreasonable, being almost two-thirds less than the rate for the comparable group in the 50 states and D.C.. In terms of the selected Hispanic origin groups, the rates of those who identified themselves as of Dominican, Mexican, or Other Hispanic origin were higher than the average, while the rate of those who identified themselves as Cuban was lower than the average and even lower than for the Hispanic origin question (4.6 percent).

⁵When examining item non-response by age, education level, and income level, the rates traditionally tend to follow some predictable patterns. Item non-response for more sensitive questions, such as race or income, is often higher for the very old and very young as well as for those with lower levels of education and income. In a preliminary look at the data, the item non-response for both the race and Hispanic origin questions in Puerto Rico followed the traditional pattern only very modestly by age and not very well at all by education and income. However, as stated earlier, this analysis is more appropriately done in a multivariate context, and so the results are not presented in this work.

Table 8: Percent of responses to the race question resulting from the edit and allocation process by Hispanic origin in Puerto Rico and the 50 states and D.C.

Origin	Puerto Rico	50 states and D.C.
Hispanic	6.2	18.2
-Puerto Rican	6.1	21.0
-Dominican	9.5	19.5
-Cuban	4.6	7.9
-Mexican	8.5	18.5
-Other Hispanic	9.0	17.8
Non-Hispanic	7.7	3.4
Total	6.3	5.3

3.5 *Does the response mode (Respondent or Enumerator supplied) affect the responses to the race and Hispanic origin questions ?*

Another typical indicator of how well a question has been received and handled by respondents is the consistency between the responses received when an individual fills out a questionnaire and those received when an enumerator does so. Presumably, enumerators are trained regarding the intention of the questions and experienced in providing responses, so their responses should be more accurate (albeit more costly).

In the examination of the responses to the Hispanic origin question, there are only slight differences in the responses given by respondents independently as opposed to during face-to-face interviews (Table 9). Because the data presented above point to a higher likelihood that the Hispanic origin question is more reliable than is the race question, any differences may be due simply to the likelihood of each group to return their form (e.g., as opposed to a specific bias in reporting).

Table 9: Census 2000 Hispanic origin distribution by Response Mode (Respondent or Enumerator Supplied) in Puerto Rico and the 50 states and D.C.

Race	<u>Puerto Rico</u>		<u>50 states and D.C.</u>	
	Respondent	Enumerator	Respondent	Enumerator
Hispanic	98.8	98.8	11.0	16.8
-Puerto Rican	95.5	94.8	1.1	1.6
-Dominican	1.0	2.1	0.2	0.3
-Cuban	0.6	0.4	0.5	0.4
-Mexican	0.2	0.5	6.1	11.0
-Other Hispanic	1.5	1.0	3.1	3.5
Non-Hispanic	1.2	1.2	89.0	83.2
Total	100.0	100.0	100.0	100.0

In the case of the race question, the data again show that there are small differences in the responses provided by individuals depending on whether or not they were obtained by an enumerator (Table 10). During interviews, those of Hispanic origin tended to give a White alone or Black or African American alone response less frequently, while giving a Some Other Race alone or Two or More Races response more frequently. Similarly, those of both Hispanic and Puerto Rican origin in the 50 states and D.C., also gave the White alone response less frequently and the Some other race alone response more frequently during interviews. However, in contrast to those of Hispanic origin in Puerto Rico, those of both Hispanic and Puerto Rican origins in the 50 states and D.C. gave the Black or African American alone response more frequently and the Two or More Races less frequently during interviews than when responding independently.

Table 10: Census 2000 race alone distribution by Response Mode (Respondent or Enumerator Supplied) of Those of Hispanic origin in Puerto Rico and those of Hispanic origin and Puerto Rican origin in the 50 states and D.C.

Race	<u>Those of Hispanic Origin in Puerto Rico</u>		<u>Those of Hispanic origin in the 50 states and D.C.</u>		<u>Those of Puerto Rican origin in the 50 states and D.C.</u>	
	Respondent	Enumerator	Respondent	Enumerator	Respondent	Enumerator
White alone	83.0	77.1	49.2	45.7	50.4	41.7
Black or African American alone	8.3	7.1	2.0	2.1	6.1	7.3
American Indian & Alaska Native alone	0.5	0.1	1.3	0.8	0.7	0.4
Asian alone	0.1	0.2	0.4	0.3	0.5	0.5
Native Hawaiian & Other Pacific Islander alone	--	--	0.1	0.1	0.2	0.3
Some Other Race alone	4.7	10.3	40.0	46.1	34.6	42.5
Two or More Races	3.4	5.2	7.0	4.9	7.5	7.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

4. RECOMMENDATIONS

This analysis has shown that the residents of Puerto Rico identified themselves as overwhelmingly of Hispanic origin and of a single race. In terms of race, the great majority identified themselves as White, with a substantial minority reporting themselves as Black or African American. When compared with those of Hispanic origin in the 50 states and D.C., somewhat fewer residents of Puerto Rico reported themselves to be of Some Other Race, and a lower percentage identified themselves as of Two or More Races. The analysis also shows that two typical indicators of problematic questions, item non-response and differences between individual and enumerator completed questionnaires, did not indicate major problems with either question.

It is somewhat difficult to offer recommendations on the basis of the analysis in this report because its findings are more descriptive than evaluative. Nevertheless, three strategies that flow from this analysis may lead to improvements in the data on race and Hispanic origin in Puerto Rico:

- Include Puerto Rico in the cognitive testing or efforts to field test different versions and formats of questions and questionnaires that are currently underway for the 2010 census.
- Investigate further the use of the “Some Other Race” category of the race question to assure that the range of responses excludes those that better fit the Hispanic origin question.

ACKNOWLEDGMENTS

The author of this report would like to thank the following people for their assistance and support in the preparation of this report:

Lea Auman
Lisa Blumerman
Jorge del Pinal
Signe Wetrogan
Janet Wysocki

REFERENCES

Davis, Diana K., Johnny Blair, Howard Fleischman, & Margaret Boone (1998a). Cognitive Interviews on the Race and Hispanic origin Questions on the Census 2000 Dress Rehearsal Form., (Arlington, VA: Development Associates, Inc.)

Davis, Diana K., Johnny Blair, Nancy Goudreau, Margaret Boone, Loretta Johnston, and Eliodoro Robles (1998b). Research on Race and Hispanic origin for Census 2000: Executive Summary. (Arlington, VA: Development Associates)

Gerber, Eleanor, and Manuel de la Puente (1998). Race, Identity and New Question Options: Final Report of Cognitive Research on Race and Ethnicity. (Washington, D.C.: U.S. Bureau of the Census)

Harrison, Roderick, Manuel de la Puente, and Claudette Bennett (1996). Findings on Questions on Race and Hispanic origin Tested in the 1996 National Content Survey. Population Division Working Paper No. 16. (Washington, D.C.: U.S. Bureau of the Census)

Appendix A: Census 2000 Race and Hispanic Origin Numeric Distribution in Puerto Rico and the 50 States and D.C.

	Total	White Alone	Black or African American Alone	American Indian or Alaska Native Alone	Asian Alone	Native Hawaiian and Other Pacific Islander alone	Some other race alone	Two or more races
Puerto Rico								
All Residents	3,808,610	3,064,862	302,933	13,336	7,960	1,093	260,011	158,415
Hispanic	3,762,746	3,030,896	297,869	12,773	5,085	728	259,626	155,769
Puerto Rican	3,623,392	2,948,704	274,969	11,156	3,941	512	239,388	144,722
Dominican	56,146	18,655	17,273	792	849	16	12,390	6,171
Cuban	19,973	18,732	462	10	31	36	382	320
Mexican	11,546	9,004	769	126	64	29	1,052	502
Other Hispanic	51,689	35,801	4,396	689	200	135	6,414	4,054
Non-Hispanic	45,864	33,966	5,064	563	2,875	365	385	2,646
50 States and D.C.								
All Residents	281,421,906	211,460,626	34,658,190	2,475,956	10,242,998	398,835	15,359,073	6,826,228
Hispanic	35,305,818	16,907,852	710,353	407,073	119,829	45,326	14,891,303	2,224,082
Puerto Rican	3,406,178	1,612,113	222,148	21,643	16,269	8,972	1,271,546	253,487
Dominican	764,945	172,851	70,216	6,413	1,786	782	443,749	69,148
Cuban	1,241,685	1,048,321	47,671	1,658	4,263	2,529	90,019	47,224
Mexican	20,640,711	9,789,599	160,218	258,119	52,023	17,877	9,326,986	1,035,889
Other Hispanic	9,252,299	4,284,968	210,100	119,240	45,488	15,166	3,759,003	818,334
Non-Hispanic	246,116,088	194,552,774	33,947,837	2,068,883	10,123,169	353,509	467,770	4,602,146

